

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Submitted herewith is a verified English translation of the Japanese priority application, in accordance with the suggestion of the Examiner in item 1 on page 2 of the Action.

Regarding item 2, all references relevant to the claimed invention are deemed by the inventors to be disclosed on the IDS forms. No further references listed in the specification are deemed to be necessary for consideration.

The specification and claims have been amended to correct the spelling of the term “sporozoite”. Accordingly, the objection to the specification and claims is deemed to be overcome.

Claim 2 has been rewritten into independent form. Claim 1 is cancelled. Other claim amendments are self-explanatory.

Claims 1-6 are rejected under 35 USC 112, first paragraph, on the basis that the specification does not provide substantive evidence that the claimed composition is capable of inducing protective immunity against chicken coccidiosis.

As suggested by the Examiner, there is submitted herewith a Rule 132 Declaration of Dr. Yoshikatsu Kodama, containing a description of comparative experiments.

In the experiments, pathogen free birds were administered the claimed composition or salinomycin as a positive control. As a result, the birds in both groups were protected from coccidiosis. This Declaration demonstrates that the claimed composition is capable of inducing protective immunity against chicken coccidiosis.

In view of the foregoing, favorable reconsideration and withdrawal of this ground of rejection is deemed to be appropriate.

Claims 1 and 3-5 are rejected under 35 USC 102 as anticipated by U.S. 5,807,551, and separately, U.S. 2006/0024294. In addition, claim 6 is rejected under 35 USC 102 as anticipated by U.S. 2006/0024294 and under 35 USC 103 as unpatentable over U.S. 5,807,551 in view of U.S. 2006/0024294. These grounds of rejection are respectfully traversed as applied to the amended claims.

Initially, it is noted that the 102(e) date of U.S. 2006/0024294 (at best March 18, 2004) is after the earliest U.S. filing date of the instant application (June 26, 2003) as well as the filing date of the Japanese priority application (June 28, 2002). It is respectfully submitted that the Japanese priority application supports the claimed subject matter. A certified copy of the priority document as well as a verified English translation thereof is now of record. Accordingly, it is respectfully submitted that the cited reference is not prior art, and that even if it were prior art, the reference could be removed as prior art under 35 USC 119. Thus the rejections based upon U.S. 2006/0024294 are overcome.

The rejections of claims 1 and 3-5 over the '551 patent are overcome by writing non-rejected claim 2 into independent form.

Regarding the rejection of claim 6 over the cited '551 patent, Reynolds disclose a method of providing artificial passive immunity to a disease agent that engenders natural passive immunity in an avian species, comprising administering an avian antibody to an egg of said species (claim 1). Although coccidia (*Eimeria* spp.) is listed as a disease agent in column 4, line 10, Reynolds only demonstrates a method of providing artificial passive immunity to Newcastle Disease virus (ND virus) and Infections Bursal Disease virus (IBD virus) (see Examples). In the examples of Reynolds, an antibody derived from serum of an immunized animal is administered to chicks by subcutaneous injection or is administered by injection to eggs. ND virus and IBD virus are viruses which inhibit the blood, and the antibody is administered by injection in the method of Reynolds. That is, Reynolds disclose a systemic passive immunity in an avian species.

The present invention relates to a method for preventing or treating chicken coccidiosis wherein an antibody obtained from an egg of a chicken immunized with an antigen having common immunogenicity shared among three *Eimeria* species is orally administered. In the method of the present invention, an antibody is obtained from an egg of a chicken, and the antibody is orally administered to a bird. *Eimeria* species are viruses which inhabit the intestine, and the antibody is orally administered in the method of the present invention. That is, the present invention discloses an oral passive immunity in a bird.

It was a common general technical knowledge at the time of this invention that oral passive immunity was quite different from systemic passive immunity both in procedure and mechanism. It was believed that only cellular immunity was effective for coccidiosis and

passive immunity was not effective before the present invention (see Infection and Immunity, July 1987, pp. 1616-1621 enclosed herewith). It would not have been obvious to one of ordinary skill in the art to modify the invention of Reynolds relating to systemic passive immunity to the viruses which are quite different from Eimeria species (i.e. ND virus and IBD virus) and make the present invention.

In addition, the antibody of the present invention is obtained from an egg of chicken immunized with an antigen having a common immunogenicity shared among Eimeria acervulina, Eimeria tenella and Eimeria maxima. In a conventional method, in order to provide immunity to the three Eimeria species in a bird, it is required to prepare three antibodies of each.

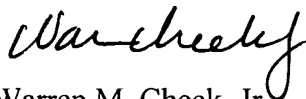
The method of the present invention can protect a bird from three Eimeria species by orally administering the same antibody according to the present invention. It is not required to prepare and administer antibodies against three Eimeria species each. Therefore, the method of the present invention also provides economic benefit.

In view of the foregoing, it is respectfully submitted that the amended claims are patentably distinct and not obvious from the cited reference for the reasons set forth.

Accordingly, favorable reconsideration and allowance is solicited.

Respectfully submitted,

Yoshikatsu KODAMA et al.

By: 
Warren M. Cheek, Jr.
Registration No. 33,367
Attorney for Applicants

WMC/dlk
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
July 5, 2006